

On pages 7 and 8, please replace the paragraph beginning on line 13 with the following paragraph:

In a previously patent application of ours, which is not prior art as to the invention described herein, for processing by a hot gas generated by an atmospheric plasma, an etch application is described. This patent application is United States Provisional Patent application No. 60/156,407 entitled "Atmospheric process and system for controlled, rapid removal of polymers from high depth to width aspect ratio holes," by inventors Bollinger and Tokmouline, filed September 28 1999 and assigned to the same assignee as for this invention. This patent application has been incorporated as part of a regular U.S. patent application filed September 28, 2000 by virtue of International Patent Application PCT/US00/27113, entitled "Atmospheric Process And System For Controlled And Rapid Removal of Polymers From High Depth To Width Ratio Holes", having a filing date of 28 September, 2000 and designating the United States. Heat flux to the substrate in that application is typically in the range of $10^6 - 10^7$ W/m². Exposure times may typically be ~50ms but in a given application the exposure time may significantly vary. For etch applications, an objective is uniform net removal of material from the substrate. Since reaction rates can vary with temperature, exposure times may be adjusted significantly to compensate. Also, in etch applications the substrate should not be significantly heated, e.g., surface temperatures should be less than about 200°C, since the processing may be done on devices further along in the manufacturing steps where the device materials may be damaged by a high temperature.

Clean Version of Each Replacement Claim

22. A substrate etching method for removing a polymer from a substrate having high depth to width aspect ratio holes, comprising the steps of:

directing an atmospheric plasma hot gas having a heat flux in the range from 10^6 to 10^7 W/m² for a controlled rapid removal of a polymer from a high depth to width ratio hole in the substrate and varying the exposure time of the substrate to the hot gas

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to obtain a uniform net removal of polymer material from high depth to width aspect ratio holes in the substrate.